

REMARKS

In response to the Final Office Action dated April 21, 2004, in connection with the above-identified application, the applicant respectfully requests entry of this amendment under the provisions of 37 C.F.R. § 1.116(a) in that the amendment and remarks below place the application and the claims in condition for allowance and in better form for consideration on appeal. Claims 1-11 and 20-23 are pending, claims 12-20 have been cancelled without prejudice or disclaimer, and claims 1-11 and 20-23 have been amended by this amendment. Reconsideration and allowance of all of the pending claims in view of the above amendments and the following remarks are respectfully requested.

Applicants wish to thank the Examiner for the Telephonic Interview on June 29, 2004. Based on the discussions with the Examiner, the applicants believe that the amendments to the claims place the application in condition for allowance.

Claims 8 and 11 were objected to because of informalities. Claims 8 and 11 have been corrected according to the Examiner's directions. It is respectfully requested that the objections be withdrawn.

Claims 1, 2, 4-6, 8-10, and 21-23 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,224,585 to Pfeiffer. In addition, claims 1, 4, 6, 9, 10, 21 and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,478,222 to Koning et al. These rejections are respectfully traversed.

The Examiner commented that with respect to Pfeiffer and Koning references, the term "generally" was broad enough that the lumens in Pfeiffer and Koning references were "generally concentric," even though they are not concentric. Thus, the Examiner interpreted the term "generally" to be broad enough to cover non-concentric lumens. As discussed during the Examiner's interview, amended independent claim 1 (and thus dependent claims 2-10) now recites "wherein the flush sleeve concentrically surrounds the implantable sensor around a

substantially common axis, such that the sensor is within the flush sleeve" (emphasis added). Independent claim 21 (and thus dependent claims 22-23) recite similar language. The Pfeiffer and Koning references do not disclose, teach, or suggest a flush sleeve that concentrically surrounds the sensor, as recited in the claims. Instead, both the Pfeiffer and Koning et al. references describe a side-by-side configuration.

Therefore, it is respectfully submitted that the rejection of claims 1, 2, 4-6, 8-10, and 21-23 under 35 U.S.C. § 102(e) and claims 1, 4, 6, 9, 10, 21, and 22 under 35 U.S.C. § 102(b) should be withdrawn.

Claims 1, 2, 4, 6-10, 21 and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,813,423 to Miyasaka et al. This rejection is respectfully traversed.

Embodiments of the present invention are directed to an implantable sensor system comprising of a sensor having a flush sleeve over the length of the sensor and a rinsing fluid delivered through the flush sleeve to spray the sensor tip. Amended independent claim 1 (and thus dependent claims 2, 4, 6-10) now recites "An implantable sensor system for taking readings from a patient in vivo, the sensor system comprising: an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids; a flush sleeve directed towards the sensor tip; a rinsing fluid; and a fluid conduit in fluid communication with the flush sleeve, wherein the rinsing fluid received in the fluid conduit is used to spray the sensor tip" (emphasis added). Independent claim 21 (and thus dependent claim 22) recites similar language. The Miyasaka et al. reference does not disclose, teach, or suggest a system where a rinsing fluid received in the flush fluid conduit is used to spray the sensor tip, as recited in the claims.

The Miyaska et al. reference describes a fine tube portion 21 for "intermittently or periodically pressing and unpressing a wall of the fine tube 1 ... such that said part of the wall is deformed by an external pressure and the original shape is restored under application of a pressure lower than said external pressure or when said external pressure is released (See col 4,

line 63 – col 5, line 6).” Nowhere in the Miyasaka et al. reference discloses, teaches or suggests the use of an external sleeve to deliver rinsing fluid to spray the sensor tip. As discussed during the telephonic interview, the Examiner stated that term “flush” would not be given any weight in an apparatus claim, and thus fine tube portion 21 (i.e. a protective sleeve) of the Miyasaka et al. reference could still anticipate the flush sleeve limitation unless the claims were rewritten as system claims. In accordance with the Examiner’s comments, the claims have been amended to recite a system.

Therefore, it is respectfully submitted that the rejection of claims 1, 2, 4, 6-10, 21 and 22 under 35 U.S.C. § 102(b) should be withdrawn.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyasaka et al. (U.S. Patent No. 4,813,423) in view of Borsanyi (U.S. Patent No. 3,863,504). In addition, claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pfeiffer (U.S. Patent No. 6,224,585) in view of Mills et al. (U.S. Patent No. 4,796,641). This rejection is respectfully traversed.

Both claims 3 and 11 depend from independent claim 1, which were patentably distinguished over the Pfeiffer and Miyasaka et al. references as discussed above. Accordingly, claims 3 and 11 are also distinguished over the Pfeiffer and Miyasaka et al. references.

The Borsanyi and Mills et al. references do not make up for the deficiencies of the Pfeiffer and Miyasaka et al. references. The Borsanyi reference was cited by the Examiner for teaching the conventional method of introducing fluid into a pressure measuring line is through a septum 37, and the Mills et al. reference was cited by the Examiner for teaching that a wireless connection is an alternative way of communicating patient data to a monitor (see pages 3-4 of the Office Action). The combination of the Borsanyi and Mills et al. references with the Pfeiffer and Miyasaka et al. references do not describe, teach, suggest or otherwise render obvious the claimed subject matter because the Borsanyi and Mills et al. references do not disclose, teach, or

suggest an implantable sensor system comprising an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids; a flush sleeve directed towards the sensor tip; a rinsing fluid; and a fluid conduit in fluid communication with the flush sleeve, wherein the rinsing fluid received in the fluid conduit is used to spray the sensor tip, wherein the flush sleeve concentrically surrounds the implantable sensor around a substantially common axis, such that the sensor is within the flush sleeve.

Therefore, it is respectfully submitted that the rejections of claims 3 and 11 under 35 U.S.C. § 103(a) should be withdrawn.

Applicant respectfully submits that the foregoing amendments are made to comply with requirements of form, and thus may be admitted under 37 C.F.R. § 1.116(a). With respect to those amendments deemed to touch the merits, admission is requested under 37 C.F.R. § 1.116(b). In this connection, the amendments were not earlier presented because they are in response to the matters pointed out for the first time in the Final Office Action. Lastly, admission is requested under 37 C.F.R. § 1.116(a) as presenting the rejected claims in better form for consideration on appeal.

Therefore, in light of the above remarks, it is respectfully submitted that claims 1-11 and 21-23 are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Northridge, California, telephone number (818) 576-4110, to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Dated: 7/12/04

By: Richard Yoon  
Richard Yoon  
Reg. No. 42,247

Medtronic MiniMed, Inc.  
18000 Devonshire Street  
Northridge, CA 91325-1219  
Telephone (818) 576-4110  
Facsimile (818) 576-6202